

AMENDMENTS TO THE CLAIMS

1. - 13. (Cancelled)

14. (Original) An apparatus for enhancing pixel color having three components (R, G, B) respectively corresponding to the primary colors of Red, Green and Blue, comprising:

a first circuitry for respectively calculating and outputting values of $(R-G)$, $(G-B)$ and $(B-R)$;

a first multiplexer circuitry, coupled to the first circuitry and responsive to a first selection signal, for selectively outputting two values of $(R-G)$, $(G-B)$ and $(B-R)$ according to a first predetermined manner;

a multiplier circuitry, coupled to the first multiplexer circuitry, for selectively generating two scaled values of $S*(R-G)$, $S*(G-B)$ and $S*(B-R)$, wherein S is a predetermined scale factor;

a second multiplexer circuitry, coupled to the multiplier circuitry and responsive to a second selection signal, for selectively outputting the $S*(R-G)$, $S*(G-B)$ and $S*(B-R)$;

an AND logic circuitry, coupled to the second multiplexer circuitry and responsive to a first control signal, for selectively outputting a set signal of $(S*(B-R), S*(G-B), 0)$, $(S*(R-G), 0, S*(G-B))$ and $(0, S*(R-G), S*(B-R))$; and

an arithmetic circuitry, coupled to the AND logic circuitry and inputting the three components (R, G, B), for selectively outputting an enhanced color components of $(R+S*(B-R), G+S*(G-B), B)$, $(R+S*(R-G), G, B+S*(B-G))$ and $(R, G+S*(G-R), B+S*(B-R))$, responsive to a second control signal.